

9. (NEW) A method for kick-down upshift speed optimization in a motor vehicle with an automatic transmission, comprising determining each kick-down upswitch point as a function of the load conditions and road inclination.

10. (NEW) The method according to claim 9, comprising adding a speed offset of appropriate sign (nd_abkd) to the current upshift point as a function of the output speed gradient (ng_ab) when a kick-down condition is recognized by a transmission control system of the transmission.

11. (NEW) The method according to claim 10, comprising storing the variation of the speed offset of appropriate sign (nd_abkd) is stored in the transmission control system in the form of a characteristic line a separate characteristic line being stored for each upshift.

12. (NEW) The method according to claim 10, comprising using an absolute kick-down switching characteristic line for the determination of the kick-down upshift point.

13. (NEW) The method according to claim 10, comprising determining the target gear for the next upswitch when a kick-down condition is recognized and determining the transmission output speed gradient (ng_ab) and then calculating the speed offset (nd_abkd), the delay times for individual gear changes being stored for application with temperature-dependent delay times being taken into account.

14. (NEW) The method according to claim 10, comprising calculating the value of the speed offset (nd_abkd) and then recalculating this value as a function of the existing driver behavior, whereby the upshift speed (n_abkd) is adapted to the driver's way of driving.

15. (NEW) The method according to claim 14, comprising recalculating the value of the speed offset (nd_abkd) as a function of driver activity by multiplying the characteristic line (nd_abkd) by a factor that depends on driver behavior.

16. (NEW) The method according to claim 14, comprising recalculating the value of the speed offset (nd_abkd) as a function of driver activity by establishing characteristic lines for each characteristic type of driver, intermediate values being determined by averaging between the driver types.

17. (NEW) A method for a kick-down upshift speed optimization in a motor vehicle with an automatic transmission as a function of road inclination, comprising the steps of:

determining an output speed gradient (ng-ab) reflecting a road inclination,,
determining a speed offset (nd-abkd), dependent upon the output speed
gradient (ng-ab), such that an engine will reach a maximum engine output speed at an
upshift point.

18. (NEW) The method of claim 17, further comprising the step of further
determining the output speed gradient (ng0ab) and the speed offset (nd-abkd) based
upon a vehicle load condition which is derived from one of a corresponding curve and
value stored in a transmission control system.

19. (NEW) A method for kick-down upshift speed optimization in a motor
vehicle with an automatic transmission as a function of road inclination, comprising the
steps of:

determining an output speed gradient (ng-ab) reflecting a road inclination,
determining a speed offset (nd-abkd), dependent upon the output speed
gradient (ng-ab), such that an engine will reach a maximum engine output speed at an
upshift point, and

altering the upshift speed according to the speed offset (nd-abkd) so that
the upshift occurs at a time the engine output speed reaches the maximum engine
output speed.

20. (NEW) The method of claim 19, further comprising the step of further
determining the output speed gradient (ng-ab) and the speed offset (nd-abkd) based
upon a vehicle load condition which is derived from one of a corresponding curve and
value stored in a transmission control system.